

114

CORRESPONDENCE

March 16-31, 1950

N. WIENER - MC 22



Port-au-Prince, le 16 Mars 1950

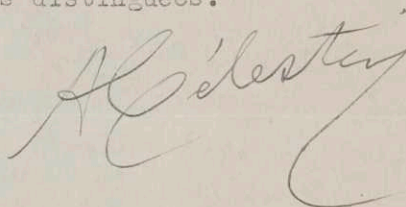
Mr le Dr Norbert Wiener  
Professeur à l'Institut de Technologie de  
Massachusetts (U.S.A.)  
Via: UNESCO

Monsieur le Docteur,

J'ai lu avec infiniment d'intérêt un article de  
Mr Maurice Goldsmith paru dans le Journal "La Phalange"  
des dimanche 12 et lundi 13 mars en cours et intitulé:  
Pour faire entendre les sourds.

Excusez-moi, si j'ose un instant vous détourner  
de vos absorbantes occupations scientifiques. Ayant deux  
neveux de 20 et 22 ans atteints de surdi-mutité de nais-  
sance, je voudrais avoir des renseignements sur l'acqui-  
sition de cet appareil extraordinaire, car ces deux enfants -  
normaux à part ces infirmités - ne rêvent qu'à leur guérison.

Comptant sur une prompte réponse afin de savoir à  
quoi m'en tenir, je vous prie d'agréer, Monsieur le Docteur,  
avec mes vives félicitations pour un si grand service rendu  
à l'humanité, mes salutations distinguées.



Adresse:  
M<sup>lle</sup> Adrienne Célestin  
26 Rue de la Réunion  
Port-au-Prince - Haiti/W.I.

March 16, 1950

Professor Sebastian Littauer  
Department of Industrial Engineering  
Columbia University in the City of New York  
New York 27, New York

Dear Professor Littauer:

Dr. Wiener has asked me to write you and say that unfortunately he will be on the road on his way to New York on the twenty-second. However, he will telephone and try and get in touch with you sometime on the twenty-third or twenty-fourth.

Sincerely yours,

~~Margaret Zemurray~~

NW:z



I have been totally  
deaf since a baby - My  
voice is in tact but I  
never learned to use it  
I feel vibrations keenly  
and am very interested in  
trying this new method -

If you can give me any  
information on the subject  
I will greatly appreciate it.

Very sincerely  
Geraldine Gibbons  
Mrs J. H. Christman  
6342 Sheridan Rd. Chicago 40 Ill

Chicago Ill  
March seventeenth -

Dr Herbert Wiener -

Dear Sir -

I am writing  
you regarding the study  
course "Hearing through  
the fingers" and am  
very anxious to know  
is it being taught  
at some Chicago school?





THE INSTITUTE FOR ADVANCED STUDY  
ELECTRONIC COMPUTER PROJECT  
PRINCETON, NEW JERSEY

March 17, 1950

Prof. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Prof. Wiener:

I am looking forward to seeing you at the Macey meeting, March 23 and 24 and in greatly enjoying the discussions that take place. I wanted to try to persuade you to come to Princeton for overnight or as long as you wish and be our guest. Mary and I both feel that we would enjoy seeing you and hearing news.

I hope you will feel free to come if possible.

Warmest regards,

*Julian.*  
Julian

JB:efd



WOT

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

66TH STREET AND YORK AVENUE  
NEW YORK 21, N.Y.

March 17, 1950

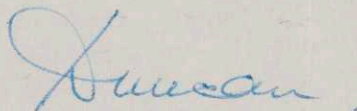
Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Norbert:

Dr. Murray Gell-Mann has made application for a National Research Fellowship, and is pretty well up on the list. I am, however, somewhat doubtful about him, and particularly that his recommendations do not include one from you. Would you be good enough to give me your appraisal of him at your early convenience.

I am leaving next Wednesday for Oak Ridge, and the committee meeting is on Saturday.

Sincerely yours,



D. A. MacInnes





# AMERICAN INSTITUTE of ELECTRICAL ENGINEERS

(HEADQUARTERS: 33 WEST THIRTY-NINTH STREET, NEW YORK 18, N. Y.)

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*Magnetics*

March 17, 1950

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Professor Wiener:

Thank you kindly for accepting to serve on the Subcommittee on Mathematics of the Committee on Basic Sciences of the American Institute of Electrical Engineers.

You will be formally invited, in due course, by the President of the American Institute of Electrical Engineers to serve on this Subcommittee.

Because it would be desirable to get this activity started as early as possible, I have arranged with the Institute Headquarters to have the work in progress earlier than the Presidential appointment would normally come. I would therefore appreciate your serving informally on our Subcommittee until that date.

Sincerely yours,

M. G. Malti

MGM/npw



Marseille, March 17, 1950

Pierre Savary  
Faculté des Sciences  
place Victor-Hugo  
Marseille (France)

to

Professeur Norbert Wiener  
Cambridge (Mass.), U.S.A.

Sir,

My parents, listening the "Voix de l'Amérique" (New York Broadcasting), on December 29-1949, were informed of your work about which was called in French "gant pour sourd-muet", or as I translate it word by word "a glove for deaf and dumb".

At the age of 6, I had a meningitis and I remained deaf. Nevertheless, I have done my studies, and I am now an assistant of chemical research at the Faculty of Sciences at Marseille. But, as you can think, I feel somewhat heavily handicapped; it is not very easy for me to understand other people and, which is more, my pronunciation is not good.

May I ask you if the apparatus you have discovered will be soon available for practical use? It would be of very great value for me, as for many other people; and I should be extremely grateful to you for an answer.

I beg your pardon for having added one letter more to the quantity you have surely received, and I am,

Sir,

yours most respectfully

Savary



# National Council of the Arts, Sciences, and Professions inc.

49 WEST 44 STREET, NEW YORK 18, N. Y.

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*File*

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JO DAVIDSON

March 17, 1950

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Prof. Norbert Wiener  
Massachussetts Institute of Technology  
Cambridge, Massachussetts

Dear Prof. Wiener:

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FATHER CLARENCE PARKER  
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O. JOHN ROGGE  
DR. MAUD SLYE  
MAX WEBER

We are planning a dinner to honor Dr. Harlow Shapley for his outstanding accomplishments in science and for the leadership he has given in the cause of world peace.

We know that his many friends and admirers from all over the world will want to join in this tribute by lending their names to the Dinner Committee. We also know that nothing would please Dr. Shapley more than to have you add your name to that of Dr. Albert Einstein's on that committee.

**TREASURER**

MICHAEL M. NISSELSON

This dinner will take place on April 28th in New York City and we hope that you will be able to attend.

We would appreciate an early reply so that we may have ample time to make this an occasion befitting Dr. Shapley's worth. Kindly wire us collect.

Sincerely yours,

*Colston E. Warner*

Colston E. Warner

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STUDS TERKEL

*Regret*



March 17, 1950

Mr. David K. Maxfield  
The University of Chicago Library  
Chicago Undergraduate Division  
Navy Pier  
Chicago 11, Illinois

Dear Mr. Maxfield:

While I am quite aware that punched cards and automatic selection methods may have a use in a library, I am very far from sanguine that any purely mechanical system can solve the problems of the library catalog. The great difficulty in bibliographies is not in those obvious bibliographies in which the Dewey system is a help, but the subtler problems where similar ideas occur in fields not superficially related, and where methods may have to be transferred between electrical engineering and say statistical theories. Indeed, the very ~~perception~~ of cataloging work may leave its user with a false impression that he has his finger tips on the cross relationships of the subject with which he deals, where he really has nothing of the kind.

Even more than this, I feel strongly that the high position which library science has obtained in America is largely due to the fact that it has become a science of readily perceived analogies, and that we are farther from the perception of the inner structure of intellectual work than we should have been if it had not flourished like the green bay tree.

Notwithstanding this diatribe please accept my thanks for a very interesting letter.

Sincerely yours,

Norbert Wiener

NW:z

March 17, 1950

Dr. Ted Shedlovsky  
Rockefeller Institute Center  
York Avenue  
New York, New York

Dear Dr. Shedlovsky:

Dr. Wiener has asked me to write you a note and say that he and Mrs. Wiener will be driving down to New York and will be delighted to have dinner with you if they get there in time. If they seem to be getting late they will call you. The date of all this is Wednesday, March 22.

Sincerely yours,

Margot Zemurray, secretary  
to Dr. Norbert Wiener



216 Campbell Street  
Madison, Wisconsin  
March 18, 1950

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts.

Dear Dr. Wiener:

According to newspaper reports you have invented an instrument which enables the deaf to monitor their speech and to speak intelligibly. Could you inform me as to whether it would be possible to procure this vibrator and to initiate my training in using it?

As you may infer, I am totally deaf and have never heard sound from the age of two when my deafness was discovered. I am a librarian at the University of Wisconsin, and my being at the university has provided me an excellent opportunity to continue my speech rehabilitation, which I began in my student days, at the speech correction clinic under the supervision of Dr. Robert West, the director and professor of speech pathology. However, not being able to hear with a hearing aid, I am anxious to try the vibrator which would



be of incalculable value in my work at the library and which would conceivably facilitate the control and improvement of my speech.

Evidently, learning to use the instrument would require time and initial training, but it occurs to me that perhaps arrangements could be made to make this possible. I expect to have a three weeks' vacation preferably later this summer, probably in August, and it is my intention to go to Boston for an examination and/or the training then. However, I could manage quite easily to meet you at a time that is more convenient for you.

I hope that you will be able to grant me an appointment for an examination and that I will hear from you very soon.

Thank you for your time and consideration.

Sincerely yours,  
(Miss) Jean Keppler



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON

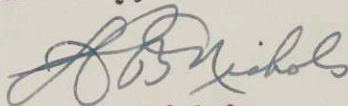
OFFICE OF THE DIRECTOR

March 18, 1950

Prof Wiener:-

Just thought you might like  
an extra copy of this story and photo.

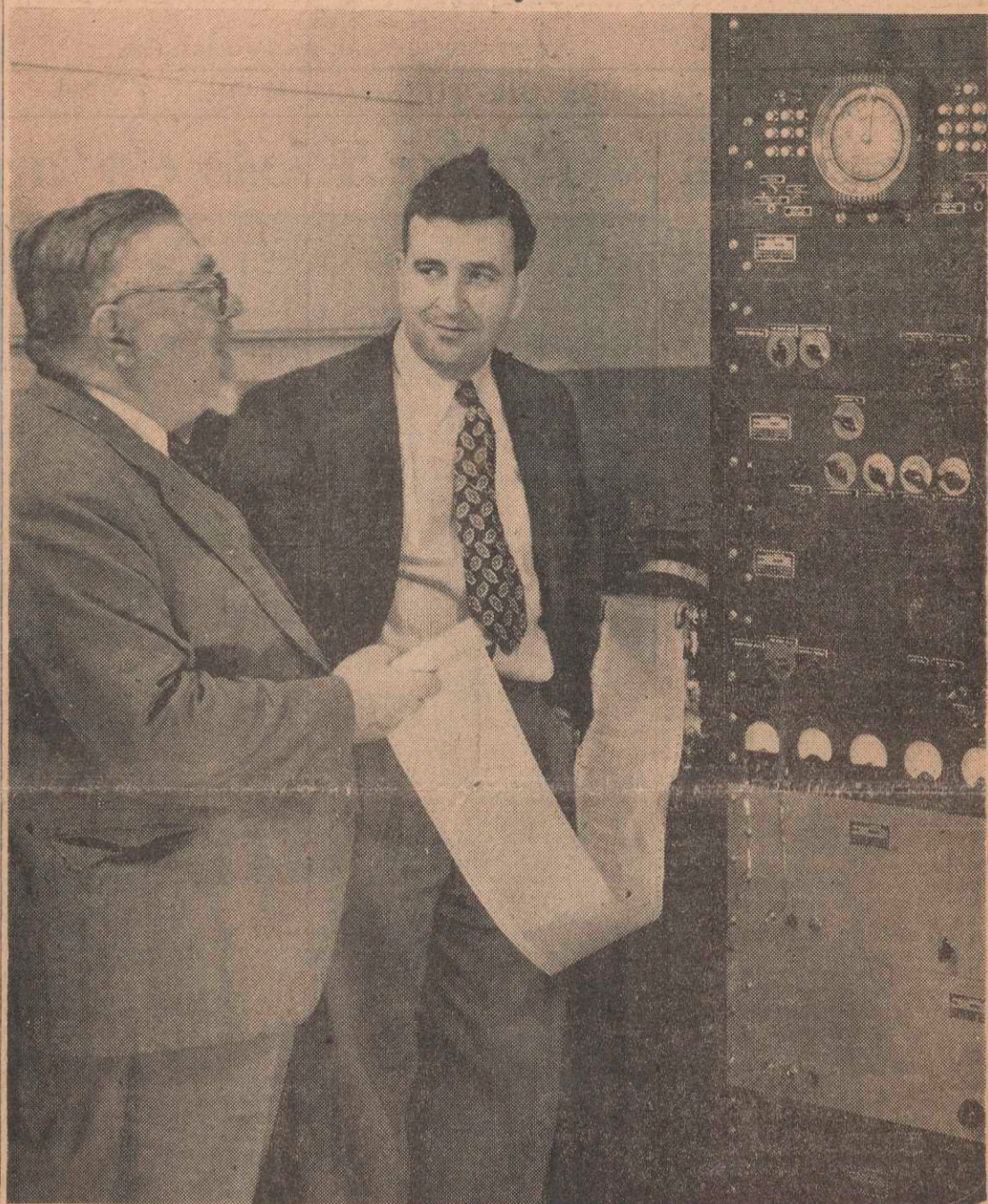
Sincerely,

A handwritten signature in cursive script, appearing to read "H. B. Nichols".

H. B. Nichols  
Asst to the Director



# Electronic Editor Analyzes Communications



Prof. Norbert Wiener (left) examining with Prof. J. B. Wiesner the "autocorollator" developed in the MIT Electronics Laboratory for the purpose of analyzing communications for predictability. Only unpredictable parts of any message contain real information, says Professor Wiesner.

## New Machine Gives Promise Of Sifting Rumor From Fact

Wonders of Research

MAR 7 - 1950 By Herbert B. Nichols

Natural Science Correspondent of The Christian Science Monitor

In the Electronics Laboratory at the Massachusetts Institute of Technology Prof. J. B. Wiesner and his associates, Dr. Y. W. Lee and Dr. R. M. Fano have developed a machine that gives promise of being able not only to sift rumor and back-fence gossip from fact, but has a few writers worried lest city desks install one to sift live news copy from pasteups.

By cutting out the useless elements in communications, Professor Wiesner believes we can get more out of radio and television, for example, and libraries may be helped out of desperate storage problems, since all types of information exchanges may be made more efficient.

Tech's solution, the "autocorollator" can analyze communication signals and indicate graphically whether they contain any real information. Only the unpredictable parts of a message contain new information, says Professor Wiesner, reasoning that if you knew what was in a letter, nothing would be gained by opening and reading it.

### Redundant Elements Found

According to this reasoning, the maximum amount of information is contained in a completely unpredictable, random message. Such a method of analyzing a communication was first suggested by Dr. Norbert Wiener, Tech professor of mathematics and Dr. C. E. Shannon of Bell Telephone Laboratories. They independently developed the theory by which any message—spoken, printed, radioed, or televised—is regarded as a random collection of signals, one following another in time sequence, just as the coal car, freight cars, and caboose follow the engine.

It turns out that certain combinations of words, letters, or signals occur very often. These are called "redundant" elements. The autocorollator is able to discover what is called the "statistical structure of a message" and do it very precisely.

All of which has importance in simplifying mankind's communication systems. For any system that is able to weed out and not transmit those parts of a message which can be forecast easily at the other end by the receiver (and would, therefore, be redundant) would obviously have higher efficiency.

### More TV Channels Possible

In a television picture, for example: The background may remain the same for several seconds while the actors move rapidly. Over this period that part of the television signal which represents the background is entirely predictable and could be filled in with complete accuracy by the receiving end, and so needn't be transmitted at all.

All that is necessary is a new background, transmitted once every time the scene changes. Or, stated another way, all that is needed is a way to "filter out" the redundant signals, and thus save the energy that is normally used to transmit them. Achievement of this goal might actually mean more television channels, or more powerful stations, or both, with no major change in television procedures. Similar elimination of "redundant" signals might also increase the efficiency of telegraph codes and radio broadcasts—in fact, it might reduce the bulk of all communications.

One-tenth to nearly all of the average message today is transmitted in signals which are predictable and hence redundant, the Tech experts say.

And if this sort of energy analysis can cut out redundant messages, perhaps the redundancy in repeatedly adding energy via the dinner table can be reduced to

say one-tenth our present consumption with a resultant saving on the weekly food bill.

Yet, there's much to be said for even a redundant helping of roast beef and potatoes with apple pie following.

### Have You Finished Your Geometry Yet?

Junior has a new wrinkle on how to get his arithmetic done. "How can you measure the height of a tree by the length of its shadow?" one youngster asked General Electric researchers at a GE Science Forum.

First the engineers tried to explain that if you can measure the altitude of the sun in degrees of arc at the same time, it is possible to determine tree height by trigonometry.

But that wasn't cricket. The lad had only a vague idea that trigonometry was a danger he might have to meet sometime later on in life. "Make it simple," he pleaded.

They tried again, and this time told him to place a vertical stick of known height in the ground and measure the length of its shadow at the same time the shadow of the tree is measured.

"Then multiply the height of the stick by the length of the tree's shadow and divide the product by the length of the stick's shadow.

"Suppose the stick is 5 feet high, its shadow 7 feet long, and the tree's shadow 40 feet. Then 5 times 40 is 200; divided by 7 is 28.5—which is the height of the tree in feet."

### Chemist Finds Major Cause of Rot

Dr. Sidney Gottlieb of the University of Maryland has isolated from mushrooms a material believed to be one of the major causes for the rotting of wood.

He explained that it is impossible for microorganisms to initiate the rotting process without the use of a chemical it produces itself. For the rotting of lignin in wood, he found the main enzyme to be ligninase and mushrooms are an abundant source of this. Wood chemists now hope that with the isolation of ligninase it will be possible to get rid of the lignin, unwanted by industries. They foresee a "pre-rotting process" of some kind.

### New Botany Guide Written for Beginners

Alfred Stefferud who turns out that ponderous "Yearbook of Agriculture" once every 12 months, is the author now of a handy little pocket volume "How to Know the Wild Flowers." (Henry Holt; New York, \$2.) Although it stresses identifications based on floral parts and other distinguishing characteristics of the flowering plants, its chief value is in the love and appreciation of nature that is inspirationally woven throughout.

Sidney Horn's line drawings, while admirable, can never take the place of colored plates and photographs in more expensive, expansive and useful "Look It Up and See" books. Nor would they satisfy the serious botanical student looking for more than gross family characteristics. There is hardly a scientific name in the whole volume, describing a species.

All of which would be pleasing to beginners, but exasperating to others who know the difficulties of trying to use common names for plants when nicknames differ so tremendously depending on where one lives. Real students of birds, flowers, animals, or insects want to know exactly what species they have at hand, not merely that it's one of the asters, a goldenrod, or a lily.



## Dearth Seen By Brannan Amid Plenty

By the Associated Press

Washington

The old farm problem of want and plenty existing at the same time is appearing again, according to Charles F. Brannan, Secretary of Agriculture.

Shortages of food which plagued even the big food producing countries during and directly after World War II, are being replaced by surpluses in those countries, including the United States, he reported.

Yet all these surpluses, the secretary said, are very small when measured in terms of needs in undernourished areas of the world.

This picture of the farm problem, from an international viewpoint, was painted by Mr. Brannan in his annual report to President Truman.

Stating that poverty and hunger in shortage areas cause political as well as economic instability the secretary said it is "our duty and our interest to help such areas toward stability and progress."

### Dual Action Suggested

Mr. Brannan said solution of this country's farm surplus problem requires action on both the international and domestic fronts. This country, he said, must buy more from foreign countries so that they would have the money with which to buy American farm products.

On the domestic front, there is need, Mr. Brannan said, for more effective farm price-support machinery to prevent a new farmed national depression.

"Currently, our purchase price-support programs encourage overproduction on the one hand and underconsumption on the other," he said.

"Once we acquire these commodities, the government must either convert the excess production into storable form, where possible, move the commodities into export outlets at reduced prices, divert them into nonfood uses, or destroy the commodities if no outlets of disposition are available."

### Plan Pressed Again

The secretary reiterated his belief that a farm program outlined by him last year, but strongly opposed in Congress and by some farm groups, would be more effective. Under this plan, the government would not buy surplus perishables, but would allow them to move to market at whatever price they would bring.

If the price averaged below the support level, the government would make up the difference to the farmer through a direct payment from the treasury.

### Free Eggs and Milk

By the Associated Press

Washington

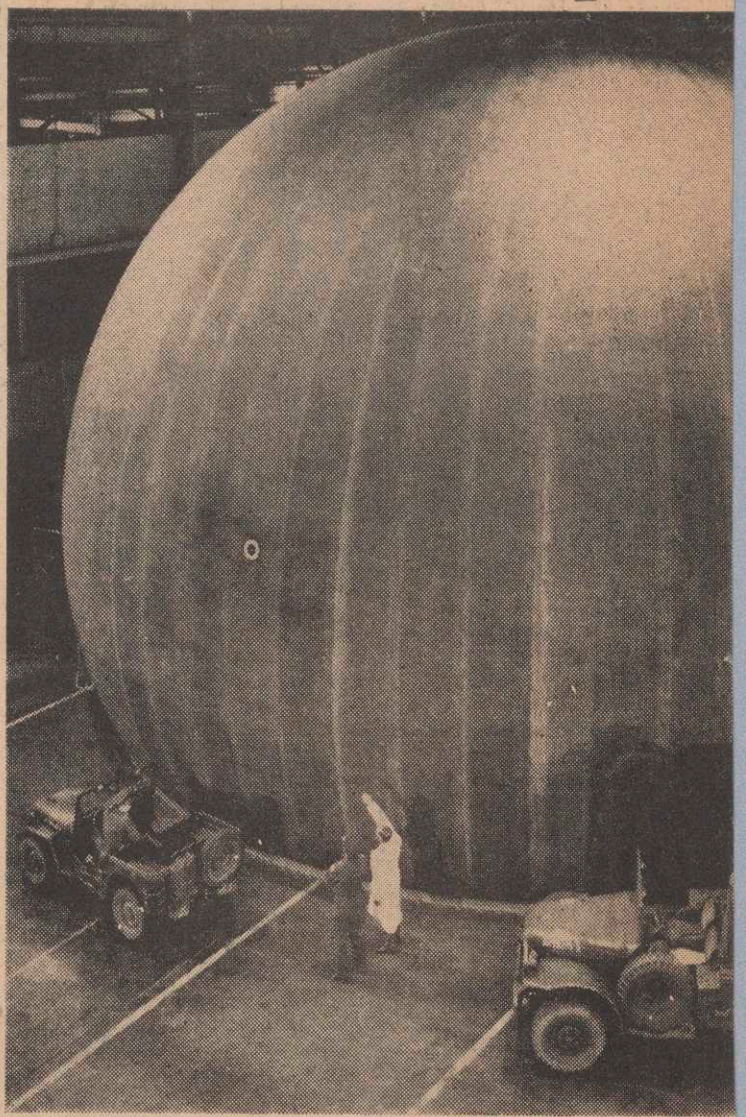
The government now offers surplus dried eggs and dried milk free of charge to private relief agencies helping the needy at home and abroad.

Early last month, the Agriculture Department had placed these commodities on a give-away list for the school lunch program, the Bureau of Indian Affairs, and federal, state, and local public welfare agencies.

Surplus potatoes have been on a free list for both public and private welfare agencies since mid-January.

Butter may be the next surplus commodity to be made available for relief use.

## Radar 'Picks Up' a



This giant mushroom is one of the rubberized fabric radomes being made by the Firestone Tire & Rubber Company to protect air force radar installations from wind, snow, sleet, and ice; It will be mounted like shelter is ho air pressure wit of any kind; yet

## Greek Left

By Constantine Argyris

Special Correspondent of The Christian Science Monitor

Athens

One of the freest Greek parliamentary elections ever, carried out March 5 in a strange atmosphere of silence and reserve on the part of the electorate, has led to an upsurge of progressive and leftist parties which has surprised most observers here.

The traditional great parties, Populist and Liberal, have emerged in runner-up position. The rightist vote throughout the country was substantially split, apparently as a result of the people's distrust of its leadership.

[With returns virtually complete, the United Press reported that the party of Gen. Nicholas Plastiras, a moderate left-wing leader, had a slight lead over the old guard parties, the Liberals and Populists.

[The Plastiras group apparently had won 51 seats, compared to 49 for the Liberals, 48 for the Populists, and 44 for the Democratic Socialists, a right-center group. The leftist bloc, led by former Foreign Minister John Sophianopoulos, also was strong.

### Coalition Possible

[It was not immediately clear how the new government would be framed, but spokesmen for General Plastiras hinted that if he were named Premier—a probable development—he would try to form a coalition with the Liberals and Democratic Socialists. Other parties, however, have said they will not cooperate with the general.]

A colorful, mustachioed veteran warrior who came out of retirement to lead a fight for moderation and civil rights, General Plastiras had directed his appeal to dissatisfied moderate leftist masses and others who sought reform of the old guard political rule.

The general is opposed to communism but favors amnesty for the guerrillas, full restoration of civil liberties, and a return to democracy.

The big cities—Athens, Salonika, and Piraeus—according to early returns, fell to the leftist bloc under Sophianopoulos, Socialist Prof. Alexander Svolos, and an extremist liberal group. The

## Senate Free

By Richard L. Strout

Staff Correspondent of The Christian Science Monitor

Washington

It's up to the Senate now whether Alaska becomes the 49th state. Behind Alaska comes Hawaii. Behind Hawaii comes Puerto Rico and the Virgin Islands.

On March 3 the House voted 186 to 146 to admit Alaska as a state. Platforms of both political parties have held out statehood for Alaska.

The House majority was considerably smaller than expected. The Senate is expected to think a long time before admitting Alaska and opening the door to statehood for Hawaii and possibly other territories.

The difficulty is that with statehood go two United States senators, and Alaska has only 100,000 citizens compared to New York with 14,000,000—also with two senators.

The debate has revived the question of whether something can't be done to equalize the distribution of senators in closer proportion to population of states. This, however, would require a constitutional amendment.

Constitutional amendments are difficult to get—"next to impossible" is the way some students call it on controversial issues.

For example, just the other day the Lodge-Gossett proposal to

## Nation

### Peril in U.S.

The Christian Science Monitor

an earlier list of 108. That is, the evidence to date indicates that the senator's list is a revision of an earlier list which has been aired before.

That earlier list of 108 cases was called by investigators of the House Appropriations Committee from State Department files in early 1947.

Every charge against any person on that old list has been investigated and assessed by appropriate authority. Many persons on that list have long since been discharged or allowed to resign. Those on the list who are still in the Department of State are there because they were cleared by the loyalty review board of the department or, on appeal, by the Seth Richardson board.

Senator McCarthy says there are now 57 Communists in the State Department. If he is taking his 57 from his own list of 81 cases, then he is talking about people who have been accused of communism or Communist affiliations, but who have been cleared of such charges long since after examination by boards headed by Republicans who, presumably, would hardly be inclined to whitewash employees of a Democratic administration.

The work of the loyalty forces of the Department of State on the list of 108 suspects was examined in 1948 by former Representative Bartel J. Jonkman (R) of Michigan. Mr. Jonkman from the floor of the House, on Aug. 2, 1948, that all "known or reasonably suspect subversives" had at that time been "swept" of the Department of State.



Citizen (e)  
LACONIA (N. H.)  
Independent  
Circ. 5,020

MAR 9 1950

## Winner Tours Science Labs

One of the two New Hampshire winners of the 1950 national Science talent search made by the American Academy of Arts and Sciences, Donald E. Eckels 17, of Laconia high school is back at classes today after making a tour of Boston science centers yesterday with some of New England's leading scientists. Donald who is the son of Dr. and Mrs. John C. Eckels was accompanied on the trip to Boston by Howard Wagner head of the science department at LHS.

The high school student said this morning that they left Laconia at 10 o'clock yesterday morning and arrived back home at one o'clock this morning. Other than for driving time their day in Boston was spent attending lectures and tours of the various laboratories of the science departments there.

At two yesterday afternoon they went to the Academy of Arts and Sciences where Donald and the other ten New England winners gave five-minute talks on the topic of science that won them the trip. Following this, Donald said, they were offered an unexpected trip to the Harvard Medical school where they were shown through the protein laboratories. The instruments and methods of establishing the amount of protein in blood and other matter was described to them there.

After touring the medical school they were taken to the Harvard Faculty club for supper and further talks with representatives of the various leading New England science schools. Their day came to an end with their attendance at a regular meeting of the Academy of Arts and Sciences. A lecture was scheduled at that time by Professor Norbert Wiener of MIT, the inventor of cybernetics. His talk on this subject dealt with the science of control and communication in animals and machines.

Mr. Wagner and Donald were deeply impressed with the value of their trip and decided that they should make tentative plans to have Laconia High School science club make a similar tour before this school session ends.



We are prone to complain about minor ailments; subconsciously mindful of some defect in body structure which if harped on has a tendency to make us irritable and lacking in personality. It is a blessing to say not all are classified in the above-mentioned category.

We have in mind Miss Norma Farrar, 21-year-old junior enrolled in the College of Liberal Arts at the University of New Hampshire.

#### **Summers at Pines**

As a youngster Miss Farrar, a resident of Winchester, Mass., spent her summers in Moultonboro at "The Pines", Beane road, under the guidance of her mother and a kindly matron, Mrs. Floris Goudey. Now did the fact the child Norma had the knowledge her vision was impaired by illness cause the young girl to be morose and lacking in the vigors of life? From personal acquaintance with the Harrell family in Winchester over the years, we say "no". The reason: Miss Farrar's academic accomplishments at the Perkins Institute for the Blind in Watertown, Mass., and University of New Hampshire are proof her mind's eye is ever alert to the beauty of life.

#### **Honored at Banquet**

The personable young woman was recently honored at the annual staff banquet of The New Hampshire held at the Stardust Inn, Kittery, Maine. Norma became the first recipient of the Personal Achievement Award, a symbolic 18-inch trophy, presented by retiring editor, Leo F. Redfern. In presenting the trophy Mr. Redfern said, "Norma has been unanimously selected by a joint committee composed of the editorial board of the paper, President Arthur S. Adams and Advisor Francis E. Robinson, as the student whose outstanding personal achievements and contributions to the campus exemplify and are most consistent with the highest ideals of the University of New Hampshire."

The well-chosen words expressed by an educator came from the knowledge Miss Farrar's goal was

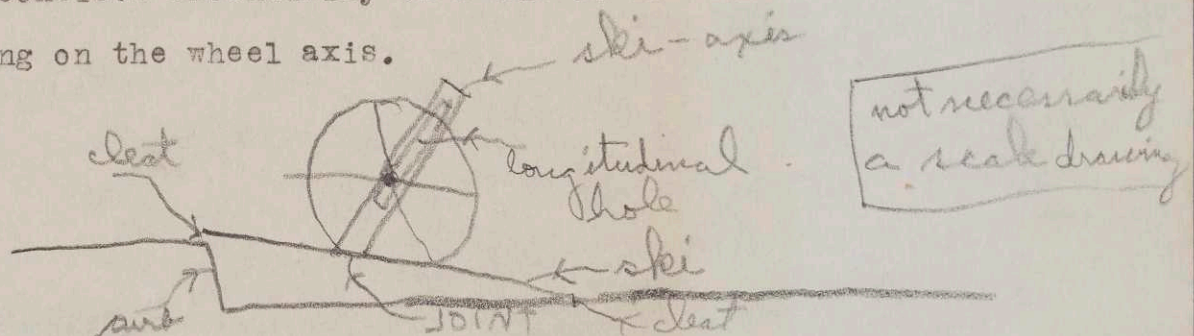
248 East 28th Street  
Brooklyn 26, New York  
March 18, 1950.

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Mass.

Dear Professor Wiener:

Thank you for your letter of March 8.

I have been thinking of the solution to the problem of curb climbing for a wheelchair. I think I have a fairly simple solution. It consists essentially of a 'ski' on an axis--the ski-axis rotating on the wheel axis.



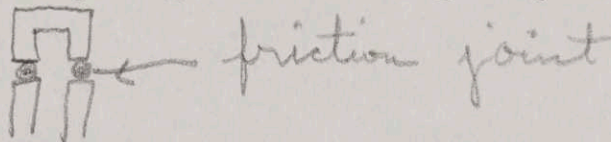
The ski can be joined to the ski-axis by a joint that allows two degrees of freedom, at right angles, so that the ski may be folded against the side of the chair when not in use. The ski-axis should be, perhaps, between the wheel and the body of the chair for less interference with hand propulsion.

The ski-axis will make one revolution per curb.

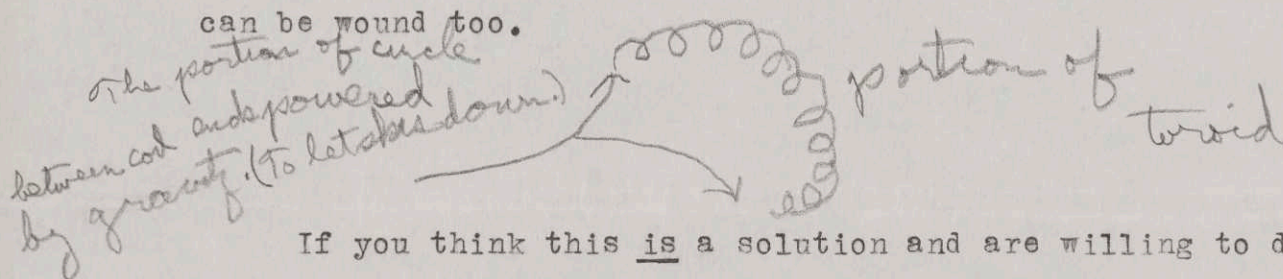
The length of the longitudinal hole will depend on the length



of the ski. For a very long ski a folding longitudinal hole may be necessary.



For motorization, a solenoid which pulls a core into itself may suffice. (In the manner of a circuit breaker). The core can be wound too.



If you think this is a solution and are willing to do the actual designing (or have it done by someone at M. I. T.), I am willing to have it put on the market on a profitless basis.

From my own hardships in not being able to afford equipment when needed I have the belief that prosthetic equipment should not be withheld from anyone because of cost.

I am sending this letter special delivery and registered because I am enthused at the idea that many people who are now home-bound may be set free by this device. (Not prematurely enthused, I hope; it may not work.)

If you can get some government agency to protect it by patent, the people who need it will be protected.

Thank you again for your interest.

Respectfully yours,

*Seymour Hilsenrath*  
Seymour Hilsenrath



## Some afterthoughts

Perhaps the notion of using part of toroid for motion is more spectacular than practical. It could be that a simple hand operated crank device (as in auto door - to raise window) would be ~~much~~ better.

---

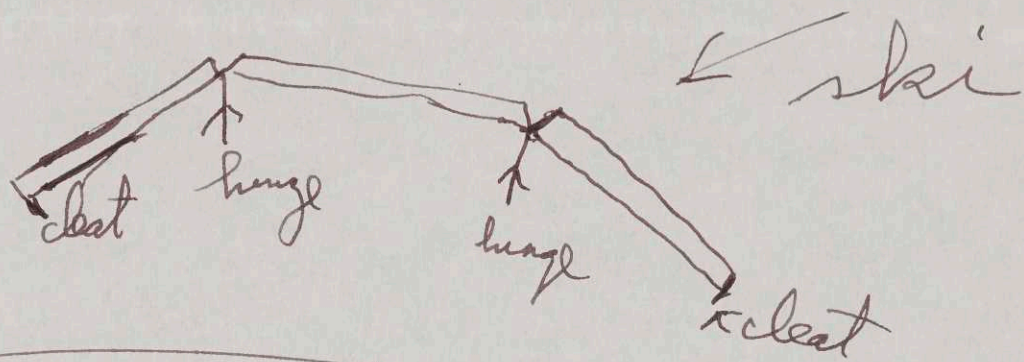
It would be best to motorize wheel chair - many patients have weak arms.

---

To increase stability of motorized chair, battery (~~it is~~ perhaps motor, also) should be as close to ground as is consistent with need to clear rubble etc on ground.



Ski can be made very long, for added mechanical advantage, - using hinges to make it compact when not in use.



Do you think there is any possibility in the use of solenoids for motion in braces? as per my first letter.

Esquire Bond

MADE IN U.S.A.

PAGE COMPANY



Dot House  
2692



Chicago 31 March 19<sup>th</sup> 1950  
7031 N. Oak Ave

Dr. Norbert Wiener  
Boston.

Dear Sir,

We have heard of your new inven-  
tion which makes it possible for  
deaf people to be able to hear through  
their fingers.

Is this wonderful device for sale  
and is it very expensive?

I would be very grateful for  
any information you may give  
me.

Sincerely yours,  
(Mrs. Joel A.) Anne M. Allen



ALBERT J. GROSSER

March 20th, 1950

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

My dear Professor:

I read your book "Cybernetics", and although I cannot say that I enjoyed it, since I only understood about 10% of it, some of it stuck in my mind, as evidenced by the fact that when I read the enclosed clipping in yesterday's Times, it seemed to me to tie in with a great many of the thoughts expressed in the first part of your book.

Cordially yours,

*Albert J. Grosser*

Albert J. Grosser

527 Greystone Road  
Merion Station  
Merion, Pennsylvania

enclosure





HOUGHTON MIFFLIN COMPANY  
2 PARK STREET BOSTON 7

March 20, 1950

Dear Prof. Wiener:

I expect to have the index back from the indexer in a few weeks and I shall, of course, send you proofs for your approval. I shall also send you in a few days, a complete set of page proofs with the diagrams inserted so that you will be able to see the position of the charts, opening pages, and general layout of the book.

Are you glad spring is here?

With my best regards,

Nina Holton  
Editorial Department

NH/sc

Prof. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts



March 20, 1950  
4051 N. Francisco Ave.  
Chicago 18, Illinois

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Doctor:

I am interested in obtaining further information in regard to an article which appeared in the Chicago Tribune of December 28, 1949, which tells of a device you have developed which utilizes the finger tips to restore hearing in the totally deaf.

I have a relative who is totally deaf due to inner nerve failure. I would be interested to know if your invention has been developed or manufactured for the public use and if so, where I could obtain such information.

Thank you very much.

Sincerely yours,

*Mrs. John Taini*



March 20, 1950

Mr. Bernard Berelson  
The University of Chicago  
Graduate Library School  
Chicago 37, Illinois

Dear Mr. Berelson:

Many thanks for your kind invitation for this summer. I regret to say that the condition of my health makes it imperative for me to take a prolonged rest, and I am afraid that I will not be available for any invitations during the summer.

However, I want to thank you again for thinking of me in this connection.

Very sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Sr. A . G. Brandae  
111 Boulevard Saint Michel  
Brussels, Belgium

Dear Sr. Brandae:

Many thanks for your paper as wellaas that of  
your collaborator. They definitely do interest  
me, but it will be some time before I will be  
able to give them the attention they deserve.

I am going to catch up with my reading this  
summer.

Sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Professor Crane Brinton  
Society of Fellows  
Harvard University  
Cambridge 38, Massachusetts

Dear Professor Brinton:

Mr. Peter Elias, who is a graduate student at Harvard working with Professor Le Corbeiller in the Department of Applied Science, has been doing his thesis on information theory in connection with the new criterion for prediction. He is also interested in mechanical models of animal behavior. He has given me a full account of his work. I have no official status in connection with the Harvard doctoral thesis, but his work happens to be along my lines, and I am able to be of use to him.

He impresses me as a very brilliant young man who has already made substantial progress in a very difficult field. I now learn that he has been nominated for a Junior fellowship at the Harvard Society of Fellows. I understand that he is interested in continuing research in information and in models of animal behavior. The three year program of a Junior Fellow would give him the opportunity to add some physiology and psychology to his repertory, and to round off the research that he has already begun. I am impressed not only by his sincerity and the breadth of his training, but with the substantial work which he has already accomplished in information theory. In both the fields in which he is interested, there is direct application of his results, and on the one hand in the construction of better and more economical television sets, and on the other in the understanding of the psychology and the learning processes, and the formation of ideas both in men and in animals. I am very careful not to recommend young men whom I do not consider qualified to enter into work in these difficult fields, but Mr. Elias has already made such substantial progress that I recommend his work, and consider him admirably fit to extend the limits of his knowledge in a region which is both inviting and arduous.

Very sincerely yours,

Norbert Wiener



Biographical.

Born U.S. 1923  
Graduated from MIT 1944  
U.S. Navy 1944-46  
Harvard Graduate School 1946-50  
Expect Ph.d. in June 1950.  
Thesis Supervisor Prof. Le Corbeiller, App. Sci. dept.

Recent work

- ① Thesis on an information theory (rather than R.M.S.) criterion for prediction: applications to coding messages from facsimile, television etc. in economical ways.
- ② A Model of Animal Behavior: a discussion of models which, with increasing complexity, exhibit simple and conditioned reflex behavior: seek goals, and find ways around obstacles in the path: and have a degree of initiative, exploring the environment until an object which is a sign of a basic goal is discovered. The paper ends with a discussion of "einsichtig" behavior, or the "gedanken experiment", as corresponding to an internal manipulation of a phenomenal world which maps the real world into the mechanism, but which is then set free from sensory ties to the real world, so that ~~now~~ problem solutions may be tried ~~to~~ internally, with no external trial-and-error behavior.



## Society of fellows

P. 2  
of 2

I have been nominated for a Junior fellowship in the Harvard Society of Fellows. This would be a three year unrestricted research opportunity. Prof. Le Corbeiller has nominated me: by the conventions of the Society I am a candidate, not an applicant. I should like to continue research in Cybernetics - both in information theory, and more especially in modelling animal behavior. The three-year program would give me an opportunity to learn some physiology and psychology, and permit me to round off the research I have mentioned above in these two fields.

## Format

The letter should be addressed to:

Prof. Crane Brinton  
Society of Fellows  
Harvard University  
Cambridge 38, Mass.

It should refer to my candidacy having been recently brought to your attention, and give an estimate of my qualifications for research in cybernetics and of the value of the work which I have discussed with you.



March 20, 1950

Mr. John W. Campbell, Jr  
Astounding Science Fiction  
Elizabeth, New Jersey

Dear Mr. Campbell:

There are a few words which if I encounter them  
in the reading of a letter always terminate that  
reading. One of the words is cure; another of the  
words is universal. Taken together, I usually  
relegate the letter to my cylindrical filing  
case.

Sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Miss Freda Kirchwey  
The Nation Associates  
20 Vesey Street  
New York 7, New York

Dear Miss Kirchwey:

Many thanks for the invitation of the Nation Associates to participate as a sponsor in the in the discussion of "The Atomic Era--Can it Produce Peace and Abundance "

Actually my opinion is that it can, but probably won't. I have a book with Houghton-Mifflin entitled the HUMAN USE OF HUMAN BEINGS due to appear early next fall in which I make my point of view clear. As I am very tired at present, I think that working through a book of this sort is more valuable than to fritter away my time in committees and groups. Therefore, if you accept me as a sponsor, it must be understood that except for my own activities in my own way, I shall be a sleeping sponsor.

Sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Mr. William J. M. Moore  
National Research Council  
Ottawa, Canada

Dear Mr. Moore: 7

Enaah listing Dr. Wiener's expenses as you  
requested in your letter.

Ticket (plane)	\$60.89
Hotel	6.00
Taxi to Boston air- port and return	7.00
Insurance	1.23
Tips	1.75
Meals	2.65
	<u>\$79.54</u>

Also enclosed you will find the receipts for  
the airplane ticket and the hotel.

Dr. Wiener will write to you himself shortly  
to tell you how much he enjoyed his trip to  
Canada and your very kind hospitality.

Very sincerely yours,

Mrs. M. Zemurray, secretary  
to Dr. Norbert Wiener



March 20, 1950

Mr. F. Morris  
Inter-departmental Technical Committee on Servo-Mechanisms  
Ministry of Supply, Room 1037  
Shell Mex House, Strand  
London, W. C. 2, England

Dear Mr. Morris:

You asked me about other people who might be interested in an international conference on servo-mechanisms. Certainly among my colleagues here I should like to mention Gordon Brown, who originally comes from Australia and Professor Jerome Wiesner of the Electronics Laboratory. Both are at MIT. There are others here as well, but I believe my friends could give you a more complete list than I can. In addition, there are important workers on servo-mechanisms at the Bell Telephone Company. I will mention among others McColl and Claude Shannon. They are to be reached at the Bell Laboratories, Murray Hill, New Jersey. Then, too, I should like to mention the group at Princeton containing Von Neumann, Julian Bigelow, and Goldstein.

I think it is highly possible that I shall be in London on the 17th of July 1951. It is, however, not yet certain. If I am, I shall be delighted to participate in your discussion provided that this discussion is not restricted to those who have a pass from their country for the discussion of official secrets. I have no such permit.

Very sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Professor Jerzy Neymann  
Institut Henri Poincare  
11, rue Pierre Curie  
Paris 5, France

Dear Neymann:

I have just been passing around the word that you are interested in a new position. Of course, it will take some time for the position to make itself evident, but the interest in your work is very great, and I have no doubt of the way it will come out eventually.

Meanwhile, I have written to the University of California indicating my lack of interest in any summer invitations so long as the policy of the Regents continues what it is.

Very sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Mr. Walter Reuther  
Union of Automobile Workers CIO  
Detroit, Michigan

Dear Reuther:

I have talked over your plan for what I would provisionally call a Council of Labor and Science with several of my colleagues, and the reaction is very enthusiastic. In particular, I have talked over detailed plans with Professor Jerome Wiesner and between us we have made up the following tentative list.

First, I am assuming that I would be on the Council. If I am not, certainly Wiesner should be. We represent the mathematical and engineering sciences. Eurie who is your own nominee is without doubt the best man we can get for atomic science and physics. Muhler, the man who protested against the Lysenko business is a geneticist of the first rank, and ought to be on our list. We should have on our list as well a good medical name, and a good name in agricultural science. It is hard for me to pick out the best medical name, but I suggest tentatively at least, a woman psychoanalyst, whom I know to be very sympathetic to your point of view in looking at things, namely: Janet Rioch, 17 West 54th Street, New York, New York. I am even more at a loss as far as the agriculturalist is concerned. I should think, however, that Muhler with his agricultural contacts from his work on animal and plant breeding would be able to help us find a name. Perhaps the work of Pincus of the Worcester Biological Foundation in connection with the implantation of ova in cattle entitles him to be considered with the agricultural group. He has certainly hit on one of the most promising devices for complete reorganization and replenishment of our herds and flocks.



Naturally this is a very tentative list for a first meeting. There will be no difficulty whatever in amplifying it to any extent we want, but I think we should keep the group small while we are talking over essential.

I enjoyed very much our breakfast meeting in Boston. I hope you got the copy of my new book that I sent to you, and I shall be very interested to see any comments you can make on it.

Very sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Mr. William B. Simpson  
The Econometric Society  
The University of Chicago  
Chicago 37, Illinois

Dear Mr. Simpson:

I am very much complimented by your letter of the tenth of March, but I must regret that I am unable to join the Econometric Society. On the one hand, it is necessary for a man working at the junction of several different fields to use a great deal of discretion as to the organizations that he joins, or he will find himself completely swamped, both in the distribution of his time and financially.

On the other hand, while I fully recognize the desirability of mathematical studies in connection with economic studies, I have rather pronounced views as to what can actually be accomplished with data as fluid and unstable as those which we are forced to use.

May I then express my regrets when I find myself unable to accept your invitation.

Sincerely yours,

Norbert Wiener

NW:z



March 20, 1950

Dr. Alexander S. Wiener  
64 Rutalnd Road  
Brooklyn 25, New York

Dear Dr. Wiener:

Many thanks for forwarding me the book from Dr. Lopicque. I should like to meet you sometime when I come to New York which will be next week for the Macy meetings. Why don't you get in touch with Dr. Freemont-Smith who is running those meetings and will know better than I do when I am free.

Of course for years I have been struck that we are name sakes, and have been very proud of having such a distinguished one. However, the name Wiener is far too widely spread for me to suppose that there is any particular probability that we are kinsmen.

Sincerely yours,

Norbert Wiener

NW:z

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*Executive Secretary*

March 21, 1950

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

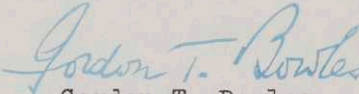
Dear Dr. Wiener:

In connection with your application for a Fulbright award it will be necessary to submit a physical examination report, and you are accordingly requested to use the enclosed form for this purpose.

The examination can be made and the form filled out by a competent physician without reference to specialists or extensive tests unless these are necessary to establish physical fitness for travel and academic work abroad.

You are requested to return the report of examination at your earliest convenience.

Sincerely yours,

  
Gordon T. Bowles,  
Executive Secretary

GTB:gmr  
Encl.



News Service  
877.2697

D. I. C.	
FILE	_____
ADSD	_____
MAR 21 1950	
PHS	_____
FLF	JHR

March 16, 1950  
Reading, Penna.

Gentlemen:

Recently I read an article in my local newspaper about the "glove" that has been invented at your institution which enables the deaf to hear. I have scanned the papers daily since then and never saw another word on the subject.

I have a nine year old daughter who was born deaf from perfectly normal parents with a normal delivery. At present, she is attending Penna. School for the Deaf in Phila.

I would greatly appreciate any information you might send to me. I would be glad to bring my daughter to see you to test her with the "glove".

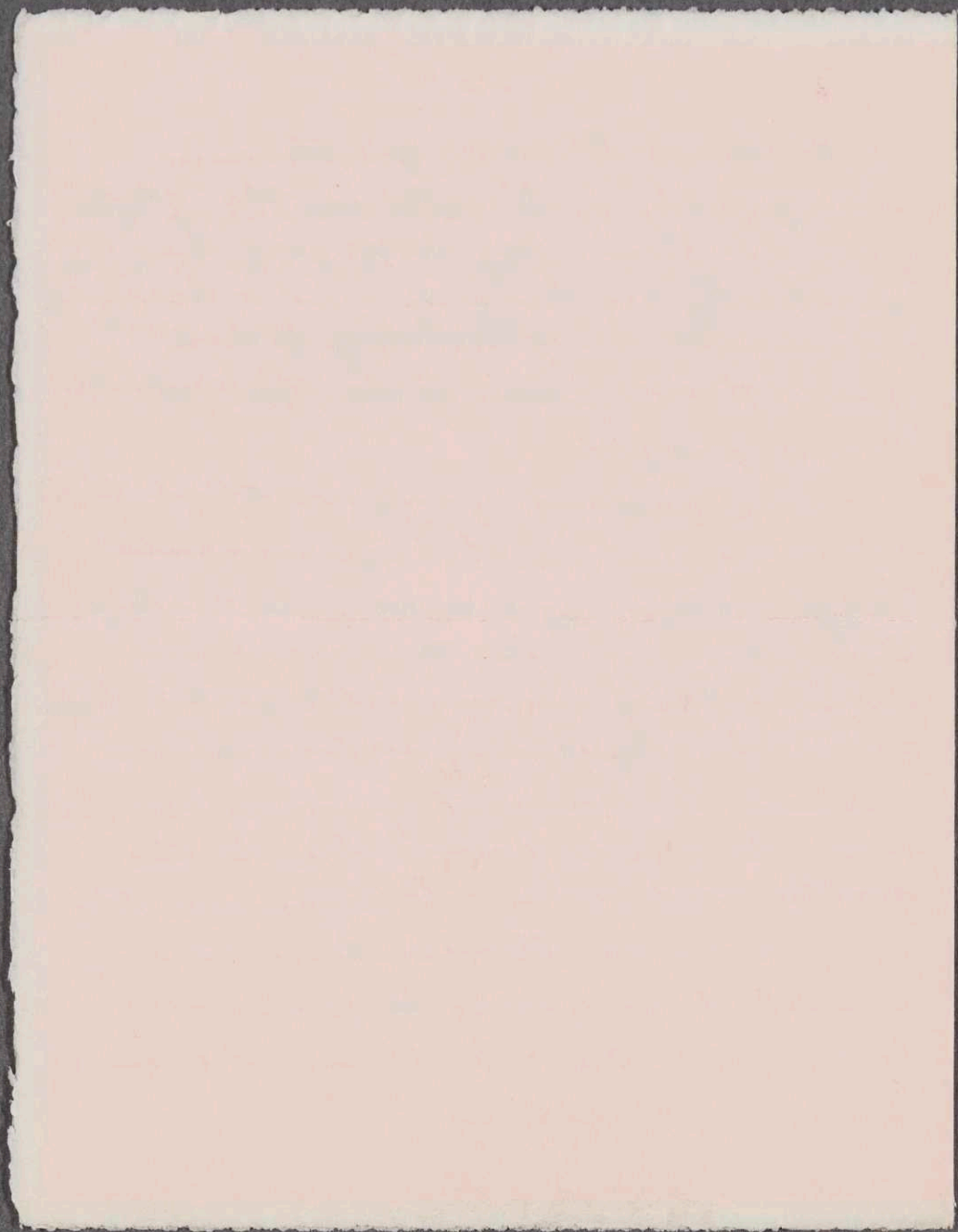
Anxiously yours,

(Mrs.) Rosalyn Dethoff  
1600 Hampden Blvd.  
Reading, Penna.

Needless to say, gentlemen, I am greatly interested in the "glove" you mention. My little girl has practically no hearing and a hearing aid would be of no help to her. Your "glove" seems to be the answer to my prayers.

I understand, of course, that the "glove" is still in the experimental stage. But I am sure you realize that this may be the most important thing in my little girl's life and I am requesting information. I want to know if your invention will be made available to the public and when. I suppose the cost will be tremendous but we would do anything to give our little girl the one thing she wants most — "hearing."







OFFICE OF THE DEAN OF HUMANITIES

March 21, 1950

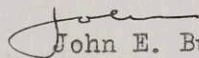
Memorandum to Professor de Santillana:

I have returned to Norbert the proofs loaned me, and have just two technical comments.

1. I think it would be sound bibliographical style, good manners, and a reasonable gesture to Tech Press to give a full reference in footnote 2, galley 3. We are very scrupulous in our own publications re Houghton Mifflin. The additional reference would be: The Technology Press of M.I.T., Cambridge; John Wiley and Sons, New York; Hermann et Cie., Paris, 1949.

2. I am very sorry to see Norbert slinging mud on galley 5, sheet 2, line 14. The footnote emasculates whatever bravura there was in the remark; it is inevitable that it will be misunderstood; and I doubt that this version of living dangerously advances his principal arguments by an inch. Indeed, I think they detract from his stature. A statement as serious as this either should not be made or should be elaborated; I know, I think, the people he is thinking of but everyone cannot be expected to know and the crack will in fact hurt him some and them not at all.

Sincerely yours,

  
John E. Burchard  
Dean of Humanities

jeb/h



- |    |                         |    |            |
|----|-------------------------|----|------------|
| 1. | Lemons                  | 10 | Cheese.    |
| 2. | Cherries                | 11 | Cigarettes |
| 3. | F. F and F              |    |            |
| 4. | Veg.                    |    |            |
| 5. | Salad.                  |    |            |
| 6. | Desert                  |    |            |
| 7. | Soup.                   |    |            |
| 8. | Sherry & other wines    |    |            |
|    | Brandy.                 |    |            |
| 9. | Flor d'oeuvres (caviar) |    |            |





NATIONAL RESEARCH COUNCIL  
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IN YOUR REPLY PLEASE QUOTE

FILE No. 17-13.A-35

DIVISION OF PHYSICS

OTTAWA, 21 March, 1950.

Professor Norbert Wiener,  
Massachusetts Institute of Technology,  
CAMBRIDGE 39, Mass.,  
U.S.A.

Dear Professor Wiener:

I greatly appreciated the opportunity of talking to you last Thursday morning and of bringing to your attention the problem about the optical measurement of the Austausch coefficient. I am writing you this letter, as you suggested, outlining the problem.

The paper I referred to is by H. Siedentopf and F. Wisshak "Die Szintillation der Strahlung terrestrischer Lichtquellen und ihr Gang mit der Tageszeit", and appeared in "Optik", Volume 3, pages 430 to 443, 1948. Their work indicates that the degree of modulation of a terrestrial light source as measured by a photocell and oscillograph has a diurnal variation of the same form as that of the Austausch coefficient. They do not, however, attempt to provide a theory connecting the two, and as I suggested last Thursday I believe that a successful theory might be of considerable use to the meteorologists. About eight months ago I discussed this problem with your colleague Professor Houghton and he agreed with me that it is important. Besides the modulation percentage there are other quantities which could be measured optically, at least in theory, such as the mean and maximum amplitude of the apparent change in direction of the distant light, the frequency spectrum of the intensity modulation, and at night one could photograph the general form of the moving shadows caused by the elements of the disturbed atmosphere (this was done by Siedentopf and Wisshak). From the practical observational standpoint, however, it would be greatly preferable to have a theory connecting the Austausch coefficient with the percentage of modulation, which can be observed with comparative ease.

I hope that you will be able to interest one of your students in this problem, as you suggested last Thursday, and I shall of course be extremely interested to hear the results. I am taking the liberty of sending a copy of this letter to Professor Houghton and also to Dr. E.W. Hewson of the Round Hill Research Station with whom I also discussed the problem last summer.

Yours very truly,

W.E.K. Middleton,  
Photometry and Colorimetry Section.

WEKM:SL

*U.S. 40/504  
W. M. S. T. - Federal  
of G. - just came  
Swiss - French*



March 21, 1950

Dr. Arturo Rosenblueth  
Instituto Nacional de Cardiologia  
Calzada de la Piedad, 300  
Mexico, D.F., Mexico

Dear Arturo:

I have now finished with the computer and I must say that the phase and amplitude ratio data do not check. This means one of several things. Either we have not covered the frequency range adequately in our experiments which neither you nor I believe; or that the phenomena is definitely non-linear, which I consider to be much more probable; or simply there is some mistake or mis-measurement in the work.

As I have said, I incline to the second supposition. This means that we have got to depend on non-linear analysis of the phenomena of nerve on the new apparatus I am developing. In this connection, I have very good news for you. We are working as rapidly as possible at Tech on the development of the apparatus, and I have more than a suspicion that it will be ready for you when you come up this fall.

Now, Verzeano is making available for you the use of a well-equipped laboratory at the Cushing Veterans Hospital complete with apparatus (made by Grass) and animals, so that we shall be able to test out new methods, new apparatus and new physiology when you are here. The seminar is running swimmingly.

We enjoyed Virginia's stay here tremendously, and are counting on a good time with you next fall. I am resting thoroughly this summer, and expect to be at the top of my form. With best regards from all of us, not forgetting Margot.

Your colleague,

Norbert

Dr. Arturo Rosenblueth--2

P.S. The data as I obtained them were not suitable for a direct harmonic analysis, so I made it on the centered first differences. If a function is analytical and well-behaved in one half-plane, so will be the function corresponding to the differences of the Fourier series. This trick was necessary because the data seemed to approach constant limits at infinity which were not zero.



March 22, 1950

Dr. Norbert Weiner,  
Mass. Inst. of Tech.,  
Cambridge Mass.

Dear Dr. Weiner:-

I fully recognize the strong implications in the words "cure" and "universal". I am not entirely given to going overboard on such matters myself. However, it is worth noting that:

We commonly speak of Newton's universal law of gravitation. And surgery cures chronic appendicitis, universally.

I regret that your reaction has been so immediately unfavorable.

I do want to point out, however, that you have not seen the demonstrable evidence in support of Hubbard's discoveries. I have, I assure you.

So far as curing certain psychosomatic conditions goes, it has been demonstrated medically that ACTH, a pituitary extract, successfully treats arthritis, and that so long as the supply of ACTH is maintained, the arthritic condition is not present. This is demonstrated fact.

It is evident that an increase in the supply of pituitary secretion, then, overcomes arthritis. If an individual's own pituitary gland can, in some fashion, be made to produce more ACTH continuously, that would cure arthritis, since glandular secretion is, normally, a continuous process. Then, if the pituitary gland can somehow be caused to secrete properly, a cure for arthritis will result.

The evidence observed by medical research may, certainly, be interpreted as indicating that arthritis is a form of pituitary deficiency, as is also asthma and, seemingly, high susceptibility to infectious disease.

The pituitary gland is heavily linked to the central nervous system.

It has been indicated by work done by many men in many places that both asthma and arthritis are psychosomatic conditions.

One might well conclude that the pituitary gland is under nervous control which can be harmfully interfered with by emotional stress. If this is true, then a process which eliminated the emotional stress, would permit the pituitary to return to normal function. Such a process would, then, cure, not simply treat, arthritis.

Medical theory has long frowned heavily on the concept of a panacea; the recent spectacular results obtained with ACTH and cortisone have seriously altered this long-held viewpoint. ACTH has been shown to treat arthritis and asthma successfully, and although it is not an antibiotic, it has brought about cures of pneumonia and TB. The pneumonia incidentally is cured, not simply treated; apparently the ACTH increases the body's resistive power to a point where it overcomes ~~infectious~~ the infectious organism. Once the invader has been destroyed, ACTH can be discontinued without relapse, of course.

There are universals, even in such seemingly-variable mechanisms as human beings. KCN universally ends life; adrenaline universally changes the blood circulatory system. All one needs to obtain a universal



2.

effect is to find one of the great, basic roots of human mechanism.

May I point out that as late as 1935 most nuclear scientists were proclaiming that the release of nuclear energy was about 200 or more years in the future.

And that the basis of the scientific method is that "experts" and "authorities" are not valid evidence; that universally-held, long-term beliefs have very small evidential value.

Particularly that must be true when the long-held belief is, in essence, "I am an expert; I know all about the subject. I can't do it, and therefore it is impossible."

Put it in these terms: any computing machine, whatever its nature, will get wrong answers if false data is fed in, and then locked in place. If the logarithm of two is given as .47712 in the computer's memory file, the computer will---universally---give wrong answers when any function involving the logarithm of two is required. And no matter how often the operators check the computing circuits for an error, they will be unable to attain correct operation until they discover that incorrectly punched data-card. Then, suddenly, all the multiferous incorrect calculations will be corrected. Correction of a single root error can produce correction of many seemingly un-connected symptoms.

But that is unimportant. I simply want to raise the question of whether the presence of "cure" and "universal" are scientifically acceptable reasons for the rejection of a thesis. I agree that they are so held by the professions which attempt, unsuccessfully to date, to achieve cures of psychic or psychosomatic ills. My own reaction to that attitude, however, is that a scientist who accepts that he can never achieve results, his goal, is evidently beaten by his own confessed inadequacy.

The physical sciences hold, on the other hand, that we don't know how to do this, or that---yet! They do not hold that anything is unknowable; only in the realm of the as-yet-unknown.

The denial of the possibility of cure on the part of the psychotherapist of the medical man seems to me to smack of the attitude "I can't do it, and if I can't, nobody can, and I won't admit it if they can", also.

The physicist does not deny the possibility of finding a Universal Field Theory.

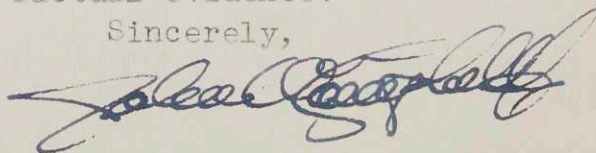
Why does the psychiatrist deny the possibility of finding a Universal Aberrative Source?

It is interesting, too, that the field which forever denies the possibility of cure, is the only field of human knowledge which has made no impressive advance since 1890---while physics has gone from no knowledge of the atom to nuclear energy, electronics, and half a dozen new octaves of radiation. And chemistry has gone from the crude beginnings of organic chemistry to commercial synthesis of hormones and semi-protein molecules.

Actually, dianetics is in a peculiar position; most psychiatrists when directly approached, when presented with the direct evidence and explanation, accept it readily. Because it, like a physical science, shows a 100% correlation between action and result, it does not need "prestige" to get started; it has results.

You see, I am not operating on the basis of belief, or previous teachings, but on the basis of demonstrated factual evidence.

Sincerely,





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TELEPHONE, EXECUTIVE 8100

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2101 CONSTITUTION AVENUE, WASHINGTON 25, D. C.

Established in 1916 by the National Academy of Sciences under its Congressional  
Charter and organized with the cooperation of the National Scientific  
and Technical Societies of the United States

March 22, 1950

Mr. Leonard Geller  
286 Westgate West  
Cambridge 39, Massachusetts

Dear Mr. Geller:

We have today been notified by the Atomic Energy Commission that arrangements have been completed to continue your AEC Predoctoral Fellowship in the Physical Sciences.

The renewal appointment will be activated as soon as we receive the enclosed Starting Date Form from your scientific adviser. Your stipend, to be paid at the rate of \$2350 per year, will be retroactive to June 13, 1950, which date should appear on the Starting Date Form, unless you have been employed for pay during the interim. In the latter case, the stipend will be resumed from the date on which you cease to receive a salary.

The award is made to enable you to continue research and study at the Massachusetts Institute of Technology under the supervision of Dr. Norbert Wiener. It will be effective to June 30, 1951 from the date certified by your scientific adviser, or to the date of the granting of the Ph.D. degree, if that date occurs earlier. In no case, will any fellowship extend beyond June 30, 1951 upon which date the contract for the AEC Predoctoral Fellowship Program administered by the National Research Council will end.

The general conditions of appointment remain the same as under the original fellowship, and are set forth in the enclosed sheet. We shall appreciate your returning one completed copy indicating your willingness to continue fellowship work under these conditions.

Very cordially yours,

C. J. LAPP  
NRC Fellowship Office

Enclosures  
cc: Scientific Adviser

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COLUMBIA UNIVERSITY CHAPTER

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Wing A, Veterans Affairs Building • Columbia University • New York 27, N. Y. • UNiversity 4-32 00 ext. 869

Mailing Address:

Box 30, Hamilton Hall  
Columbia University,  
New York 27, N. Y.

23 March 1950

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts.

Dear Professor Wiener:

On Monday 17 April three student organisations at Columbia, AVC, UWF, and the United Nations Council, are presenting a panel discussion of the "Cold War". Herewith we invite you to speak at this meeting.

Now I shall try to tell you what we want to do. We feel that the public suffers from too many words about the international situation that mean too little. We think that it would be A Good Thing (See 1066 And All That for an implicit definition of "A Good Thing") for Columbia to hear an intelligent sort of discussion of some of the problems involved. We have invited a number of prominent people, including Walter Lippmann, Henry Wallace, Senator McMahan, Professor Paul Lazarsfeld, Erich Fromm, and Michael Straight. The objective is to avoid quarreling over foreign policy and to get as close to analysis-of-problems as can be hoped for in a public meeting of limited duration.

You may ask, why do we bother you with our invitations? First, frankly, we are looking for names, and the cybernetics book has made you a name. You are our Representative of Science. Parenthetically, I wonder how many people have read Cybernetics; while most interesting, it is rather hard going even for the non-applied mathematician. But I really think that you could contribute a great deal to this affair, and that you might even enjoy it.

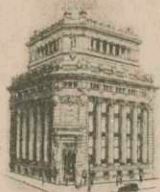
If you indicate that you would like to come, we shall brief you on how the meeting is to be conducted, and so on.

A final request: Even if you are unable to speak at this meeting, the organising committee would appreciate any suggestions as to books and papers in the area of world politics that you may have found worthwhile.

Sincerely,

Lewis Fulkerson





BANCO CENTRAL

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PRIVATE

Alicante 24 th March 1950

Dr, ROBERT WIENER  
Massachusetts Institute of Technology  
CAMBRIDGE.- (Massachusetts)

Dear Sir,

I have read in a Spanish news-paper an information about the "ear-glove" invented by you, I am a bank employee and it is ten years ago that I am quite deaf.

My deafness has been produced by unpleasantness in my life and serious obstacles in my profession and work.

Therefore I am very interested in having full information about the device of your invention, in the hope that I may find a real remedy to my deafness.

I expect you may be good enough to give me your information and excuse me for my request.

As you will understand, being an employee I am not a wealthy person, however I am prepared for any sacrifice to be able to get your "ear-glove" to enjoy the happiness to recover the sense of hearing.

I look forward with pleasure to hearing from you and thanking you in advance for your attention to my enquiry.

I am, yours truly

My address is:  
Tomás Ayllón de la Peña  
Banco Central  
ALICANTE (Spain)



DOCTEUR HENRI CHEVALIER

ANCIEN INTERNE DES HÔPITAUX DE PARIS  
EX-CHEF DE CLINIQUE CARDIOLOGIQUE A LA FACULTÉ  
MÉDECIN ASSISTANT DES HÔPITAUX DE PARIS

SUR RENDEZ-VOUS

133, BOULEVARD MALESHERBES. XVIII

WAGRAM 15-39

Boston 24 Mars 1950

Cher Professeur Wiener

Peut-être mes souvenirs de moi : nous nous sommes  
connus à Mexico-City il y a quelques mois.

Je reste maintenant en France et je n'étais arrivé  
aujourd'hui à Boston pour visiter le Dr Paul D. White  
et pour vous saluer. La secrétaire du Dr White a  
su par votre "office" que vous êtes absent pour  
quelques jours. Je le regrette bien vivement.

Mais je crois que vous serez à Paris au début de  
l'année prochaine. J'espère alors avoir l'honneur de  
vous revoir si vous voulez bien me contacter lorsque  
vous serez installé dans votre capitale.

J'espère que votre santé est bonne, et je mes prie  
d'agréer, cher Professeur Wreber, mes très respectueux  
saluts.



P.S. Je m'excuse de vous écrire en français, car ma  
connaissance de l'anglais est encore trop imparfaite...



HARVARD UNIVERSITY  
SOCIETY OF FELLOWS  
WIDENER 98  
CAMBRIDGE 38, MASSACHUSETTS

March 24, 1950

Dear Professor Wiener:

Thank you very much for your letter of March 20 to Professor Brinton supporting the candidacy of Mr. Peter Elias for a Junior Fellowship.

Sincerely yours,

*Elizabeth F. Hoyer*

Secretary

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 38, Massachusetts

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS

DEPARTMENT OF ENGLISH AND HISTORY

March 25, 1950

Miss Margo Zammurray  
Sec. Professor N. Weimer  
Massachusetts Institute of Technology  
Cambridge 39, Mass.

Dear Miss Zammurray:

I will be glad to speak at the meeting  
of the Interscience Committee. I hope  
the theme:

On the changing outlook of the specialist.  
may be welcome.

Perhaps you will phone Miss Butler in  
the English Department about it.

Very sincerely yours,

*S. Giedion*  
S. Giedion

SG:evm

*S. Giedion*



NEW YORK UNIVERSITY  
WASHINGTON SQUARE COLLEGE OF ARTS AND SCIENCE  
WASHINGTON SQUARE, NEW YORK 3, N.Y.

DEPARTMENT OF MATHEMATICS  
*Research Group*

TELEPHONES:  
GRAMERCY 7-1448  
SPRING 7-2000

25 March, 1950

Dear Professor Wiener:

The Mathematics Department of New York University and the Geophysical Research Directorate of the Air Force Cambridge Research Laboratories are jointly sponsoring a Symposium on The Theory of Electromagnetic Waves to be held at the Washington Square center of the University on June 6, 7 and 8 of this year. On behalf of these organizations, I am pleased to inform you of this symposium and express a cordial invitation that you attend.

The purpose of the Symposium is primarily to bring together American and European research workers in the separate but overlapping fields of mathematics and theoretical physics for an exchange of ideas on problems of mutual interest. It is the opinion of many members of the University and the Geophysical Research Directorate that in recent conferences rather little time has been devoted to the accomplishments and difficulties involved in the theoretical approach to electromagnetic problems and that a meeting devoted specifically to this aspect of the work would be highly beneficial to all participants.

Our program is now being arranged and we are enclosing a tentative announcement of its contents. In addition to the formal presentations and discussions thereafter, there will be several afternoon teas and a dinner which, we trust, will further enable participants to exchange information informally and to renew personal acquaintances.

Unfortunately, the facilities available for the Symposium are quite limited. We would therefore appreciate your mailing the enclosed card advising us of your plans with regard to this symposium as soon as convenient for you. Further information concerning arrangements will then be sent to you as soon as it is available.

Yours very truly,



Morris Kline  
Associate Professor of Mathematics  
Director of Research Group



248 East 28th Street  
Brooklyn 26, New York  
March 26, 1950.

Professor Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Mass.

Dear Professor Wiener:

In re-reading my last letter to you I recognize the fact of its being opaque and insufficiently descriptive. I wish to apologize for this. It was written in very great enthusiasm.

I also recognize that my request that you take part in the development of the described device was presumptuous. Again I wish to apologize for my hyper-enthusiasm.

What I called a 'ski' is a narrow piece of metal, wide enough to accommodate both wheels on one side of a chair--with a little extra width for safety. Unlike a ski, however, it won't curve upward at the end. There will be one for each side of the chair.

Using what I mis-named a ski-axis would introduce the not insignificant effect of having the chair occupant's arms caught each time it revolved. This shortcoming can be eliminated by use of a telescoping rod--the same effect as in a set of curtain rods--one end of the rod terminating in a hinge at the center of the ski, the other at the axle of the chair with a hole in it to accommodate the axle.

The handcrank for motion, referred to a means for retracting



the gear after going up or down a curb.

I would be grateful for your comment.

Respectfully yours,

*Seymour Hilsenrath*

Seymour Hilsenrath

*70 ams*

UNIVERSITY OF CALIFORNIA

OFFICE OF THE CHAIRMAN  
DEPARTMENT OF ENGINEERING  
LOS ANGELES 24, CALIFORNIA

March 27 1950

D 16352

Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39 Massachusetts

Dear Dr. Wiener:

Your letter of March 8 1950 caused my thoughts to run as follows: I was greatly impressed by your ability to observe, assess the facts, and then reach a rational conclusion. This procedure was observable both in your specialties (where many others also perform correctly and adequately) but also in several instances in connection with areas outside of your specialties. This characteristic I greatly admired.

I trust that you will await final judgment with respect to our problem until all of the facts are at your disposal.

Please accept my regards.

  
L. M. K. Boelter



Carroll M. King  
619

# BURDEN NEUROLOGICAL INSTITUTE.

---

TELEPHONE: FISHPONDS 53221-2.

STOKE LANE,  
STAPLETON,  
BRISTOL.

Professor Norbert Wiener,  
Massachusetts Institute of Technology,  
Cambridge, Mass.

27th March 1950.

Dear Wiener,

Many thanks for your note of the 19th inst.  
I am enclosing a tear-out which may amuse you, together  
with some more serious publications.

I hope all goes well with you.

Yours sincerely,

*W. Grey Walter.*



# SCIENCE IN REVIEW

## Two Electro-Mechanical 'Tortoises' Exercise Something That Resembles Free Will

By WALDEMAR KAEMPFERT

To assist research on the human brain and nervous system, two electric "tortoises" have been constructed at the Burden Neurological Institute, Bristol, England. These electro-mechanical animals are believed to be the first mechanisms capable of exercising what looks like "free will."

The "tortoises" are one-eyed contrivances about eighteen inches long, driven around on three wheels by miniature electric motors. Under a metal shell they carry muscle-motors and stomach-batteries. There is also a midget "brain" composed of two radio tubes, electrical relays and condensers.

Connected with a photoelectric cell or "eye" and a sensitive contact housed in the shell, this "brain" gives the "tortoises" the power to roam all over a house. This they do, avoiding tables and chairs and searching for light by night and shady corners by day. For light means "food" to them—that is, the electric energy needed to charge their batteries.

The "tortoises" are hard to please. Even winter sunlight is so bright for them that they prefer the small lamp in their hutch, where they can find the contacts from which flow the direct current that keeps them "alive." When their batteries are well charged, even the shelter of their hutch repels them, so that at night they emerge and diligently seek all the lights and bright surfaces in the house.

According to Dr. and Mrs. W. Grey Walter, their designers, the "tortoises" sometimes bump into obstacles by mistake. Then they back away, approach again more cautiously and patiently sidle around the obstacle until they are out of trouble.

While involved in problems of this sort, the "tortoises" are not concerned with light. For a few seconds after they are free, their short memories retain an impression of the incident, which gives them time to circumvent obstacles before the craving for light returns. In this respect the "tortoises" are more intelligent than moths, which always fly into a flame.

Having observed the behavior of his "tortoises" for over a year, Dr. Walter is still unable to predict what they will do in every situation, though their general habits are fixed by the way in which they are made. He has found them a valuable aid in testing the various theories of brain function.

The "tortoises" contain only two active elements, the human brain 10,000 million. Nevertheless, the amazing independence and cautious responses of the creatures are not so different from ours as a ratio of one in 5,000 million would suggest. This may mean that the vast number of single cells in the human brain work in groups of a million or so at a time.

making certain amino acids, the building blocks of proteins, from other food-stuffs.

It follows that the granules—the mitochondria—are more potent in performing some of these vital tasks than the cell nuclei. The mitochondria are very fragile. They respire, i. e., consume oxygen and produce carbonic acid, and if they are broken they lose their activity. Heat or poison will destroy their powers. Probably they are enzyme aggregates.

The object of the research is (1) to determine the complex inner workings of normal cells, and (2) to learn why cancer cells function abnormally.

## Single Cell Analysis

### New Biochemistry Methods Will Permit Minute Examinations

Dr. Paul L. Kirk professor of biochemistry at the University of California, in his new book "Quantitative Ultramicroanalysis," predicts that in the not too distant future it will be possible for scientists to make accurate chemical analyses of single living cells. If he is right, biology will be revolutionized. His ultramicrochemical techniques were used in developing processes for chemically separating plutonium from Uranium 238 at a time when only specks were available.

According to Dr. Kirk, it is now possible to analyze accurately chemical samples weighing as little as a few billionths of a gram. (It takes about 28 grams to make one ounce).

The analysis of single cells will be extremely important in tissue culture studies which Dr. Kirk is now making for the American Cancer Society. It should be easier to understand the biochemistry of a single cell than of a whole animal.

Ultramicrochemistry is already of biological importance. Analysis of tail blood from mice or rats will often yield as much information as quarts of blood from slaughtered animals. In medicine, microanalysis has been strikingly successful in permitting pediatricians to use tiny blood samples taken from the fingers or ear lobes of infants.



# RAINMAKERS GET CHANCE TO TEST THEIR SCIENCE

## Progress Has Been Made in Recent Years on Theoretical Level

By WALDEMAR KAEMPFERT

The rain-making experiment that New York City is about to make to replenish its water supply is the most extensive and scientifically the most important that has ever been made. It will settle, perhaps once and for all, the controversy that still rages between skeptical meteorologists who deny that rain can be made to order and the team of General Electric scientists, headed by Nobel prize winner, Dr. Irving Langmuir, who believe that something can be achieved. If the experiment succeeds it will be of world-wide importance, for it will be possible to overcome many droughts.

The conditions under which rain or snow naturally falls out of a cloud were not understood until Dr. Langmuir, Vincent J. Schaefer and Dr. Bernard Vonnegut of the General Electric Company interested themselves in meteorology. They knew that in a cloud drops of water always form around nuclei of some kind—"sublimation nuclei," in the weather man's language. These nuclei may be nothing but dust. Their knowledge of cloud and raindrop or snowflake formation ended.

### First Experiments

Contrary to scientific belief, Langmuir and Schaefer found in 1946, when they began their studies, that water droplets in a cloud will not turn into ice crystals when the temperature is freezing (0 C. or 32 degrees F.). Many a cloud proved to be supercooled, yet no snow or ice dropped as it should have according to the old teaching. Yet, all of a sudden, snow or rain would often fall out of such a cloud.

Just why this should happen was a puzzle until Schaefer began to experiment with a kitchen refrigerator. On a hot summer day in 1946, Schaefer put some lumps of dry ice (solid carbon dioxide "snow") in his refrigerator to keep the temperature down. This dry ice itself had a temperature of minus 78.5 degrees C. Schaefer

is a jolt. Ice crystals flash into being. These little ice crystals form nuclei, and bigger crystals grow. When the crystals are big enough they drop out of the cloud by their sheer weight either as snow in winter or as rain drops in summer. If clouds are present but no snow or rain falls, Langmuir and Schaefer decided, it is because the water droplets in them have not reached the critical low temperature of minus 39 degrees Centigrade.

### Ice Crystals for Rain

In nature, as in the laboratory, there must always be nuclei around which the droplets of moisture in a cloud can cluster, but in nature the nuclei are ice crystals. If there are no ice crystals there can be no snow or rain, though the cloud may rise to heights where the temperature may be below freezing yet not as low as minus 39 degrees Centigrade. On the other hand, if the cloud rises so high (33,000 feet or so) that the temperature does drop to the critical minus 39 degrees Centigrade, ice crystals will always form. Hence there will be snow or rain.

The inference is obvious. If the cloud has a temperature higher than minus 39 degrees Centigrade drop pellets of dry ice into it from the top. In the beginning Langmuir and Schaefer worked only on the principle that the temperature of a cloud had to be reduced to minus 39 degrees Centigrade and that a cloud could not be seeded with dry ice pellets unless at least part of it lay above freezing level, as shown in one of the accompanying diagrams.

### "Fooling" the Cloud

Then Dr. Vonnegut of the General Electric laboratories interested himself in the work that Langmuir and Schaefer were doing. He decided that by "fooling" the cloud, as it were, snow or rain could be precipitated even though the temperature was higher than 39 degrees C, so that it would often be necessary to sow a cloud with dry ice pellets and so bring the temperatures down to 39 degrees Centigrade at which ice crystals (nuclei) would form. In other words, he would look for crystals which were not ice, but which would "deceive" the cloud, so to speak, into thinking they were ice and hence nucleate around which minute, light water droplets would cluster.

After running over a list of materials, Vonnegut decided that

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March 27, 1950

Dr. Hudson Hoagland  
Worcester Foundation for Experimental Biology  
888 Maple Avenue  
Shrewsbury, Massachusetts

Dear Dr. Hoagland:

The next meeting of Dr. Wiener's seminar group will be held on Thursday, April 6, at 6:30 p.m. in the Campus Room of the Graduate House at MIT. Dr. Sigfried Giedion will speak on "The Changing Outlook of the Specialists."

Would you drop me a note and let me know if you and Dr. Pincus can come.

Very sincerely yours,

Mrs. Margot Zemurray, secretary  
to Dr. Norbert Wiener

NW:z

*Handwritten:* 7-2-50

THE WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY  
222 MAPLE AVENUE  
SHREWSBURY, MASS.

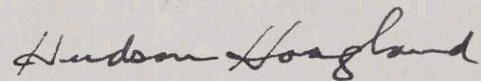
March 28, 1950

Mrs. Margaret Zemurray  
Secretary to Dr. Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Miss Zemurray:

I regret very much that Dr. Wiener's next seminar conflicts with a seminar we are having here involving a speaker from Baltimore. It will thus be impossible for either Dr. Pincus or me to attend.

Cordially yours,



Hudson Hoagland

HH:B

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28 March 1950

Dr Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Mass.

Dear Dr Wiener:

We have received from Dover Publications an offer to publish a reprint of your book, *THE FOURIER INTEGRAL*, which, as you know, has been out of print for some years. Their offer is to pay a royalty of 10% of the list price with a guarantee of a sale of 1,000 copies at a list price of approximately \$3.00.

As you know, the shortages of paper and time on the machines in England has meant that we have been unable to reprint a very large number of books in the last few years, and we see no immediate prospect of being able to reprint *THE FOURIER INTEGRAL* ourselves. We are therefore inclined to recommend the acceptance of this offer, and I am writing to you to find out if you agree.

Dover Publications are a reputable firm and have reprinted several of our scientific books. We would propose that 75% of the royalty paid to us by them be paid over to you; I shall look forward to hearing from you whether you would find this satisfactory.

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'F. Mansbridge'.

FRMjs



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March 28, 1950

Prof. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

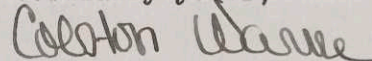
Dear Prof. Wiener:

At a dinner in honor of Dr. Harlow Shapley on April 28th at the Hotel Capitol, New York City, we should very much like to present to him a book of personal tributes.

We thought that many of Dr. Shapley's friends and admirers the world over would welcome an opportunity to express their appreciation for his contribution to science and to the cause of world peace. We would be pleased to have you send us a brief message that could be included in the folio, since we believe that nothing we could present to Dr. Shapley would have more significance for him than a permanent record of the respect and gratitude of people like yourself.

It would be helpful if we could hear from you as soon as possible so that we may have adequate time to prepare a memorable gift.

Cordially yours,



Colston E. Warne

Dinner Committee (partial list)

Frank Aydelotte	Albert Einstein	Otto Nathan
Algernon Black	Henry Pratt Fairchild	Erwin Panofsky
Dorothy Brewster	Earl Parker Hanson	Artur Schnabel
Van Wyck Brooks	Ernest Hocking	Louis Untermeyer
Dr. Allan M. Butler	John A. Kingsbury	Oswald Veblen
A. J. Carlson	Harry C. Lamberton	Colston E. Warne
John J. De Boer	Kirtley A. Mather	Edward L. Young
Olin Downes	F. O. Matthiessen	



March 28, 1950

Herr Friedrich Katscher  
Vienna (Wien) II  
Grosse Mohrengasse 20, Austria

Dear Sir:

I think that you can obtain a copy of my book Cybernetics through Hermann et Cie, 6 Rue de la Sorbonne, Paris. They are the European publishers and will also have some material such as newspaper clippings and the like which they will probably send on to you.

The best definition of Cybernetics is I think, the subtitle, The Science of control and communication in the animal and the machine.

As to my ancestry, while my family has Viennese connection, my immediate family on my father's side comes from the city of Byalostock in Poland and earlier from Krotoschen. On my mother's side the family is of German Jewish origin, some branches of which have been domiciled in America for the better part of a century.

Sincerely yours,

Norbert Wiener

NW:z

BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY

G. BALEY PRICE

MEMBER OF EDITORIAL COMMITTEE

UNIVERSITY OF KANSAS

LAWRENCE, KANSAS

March 29, 1950

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

Your invitation to give the Gibbs Lecture at the last Annual Meeting of the Society carried with it an invitation to publish your lecture in the BULLETIN. The editors will be pleased to receive your manuscript at any time.

Sincerely yours,

  
G. Baley Price



# American Design Awards

Established by Lord & Taylor in 1937

## Committee

*Miss Dorothy Shaver, Chairman*  
*Miss Sarah G. Blanding*  
*Mr. Colby Chester*  
*Mr. Russell Davenport*  
*Dean Donald K. David*  
*Mr. David Dubinsky*  
*General Georges F. Doriot*  
*Mr. Carl Eichelberger*  
*Mr. John Gunther*  
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*Mrs. Juan Trippe*  
*Dr. Harold Urey*  
*Mr. Thomas J. Watson*  
*Mrs. Cornelius Vanderbilt Whitney*  
*Dr. Norbert Wiener*  
*Mrs. Wendell Willkie*

March 29, 1950

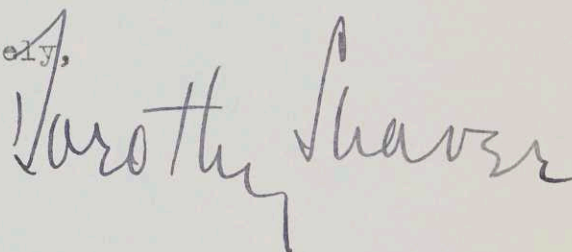
Dear Dr. Wiener:

It will give me a great deal of pleasure if you will attend the American Design Awards luncheon as one of our guests of honor.

The luncheon will be held in the grand ballroom of the Waldorf Astoria on Wednesday, April the nineteenth. A reception in the Basildon Room will begin promptly at eleven forty-five.

Do let me know if you can be with us on the dais.

Sincerely,



Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

4th Annual  
EASTERN COLLEGES SCIENCE CONFERENCE  
BARNARD COLLEGE

Address Correspondence to:  
FRANCES FUCHS  
E. C. S. C.  
Room 105, Barnard Hall  
Barnard College  
New York 27, N. Y.

CHARLOTTE GRANTZ, *Executive Chairman*  
DOROTHEA BENNETT, *Executive Secretary*  
FRANCES RYDER, *Executive Treasurer*  
FRANCES FUCHS, *Corresponding Secretary*

March 29, 1950

Prof. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Mass.

Dear Prof. Wiener,

The Science Conference Committee would like to thank you for accepting our invitation to speak at Barnard College on Saturday, April 29, 1950 at 2:30 in the afternoon.

However, we have not as yet received from you the exact title of the lecture. The conference journal goes to press at the end of the week and it would be greatly appreciated if you could wire to us collect, the exact title of your talk. We were wondering if you wouldn't speak on something connected with Cybernetics.?

Also please let us know what hotel accommodations you will be needing during the conference. More exact details and a program will be sent to you at a later date.

Yours truly,

*Joan Weiss*

Joan Weiss  
Chairman, Lecture comm.



March 29, 1950

Mr. Lewis Fulkerson  
American Veterans Committee  
Wing A, Veterans Affairs Building  
Columbia University  
New York 27, New York

Dear Mr. Fulkerson:

I am finding it necessary to restrict my political activities to the writing of books and articles, as there simply is not time for me to carry on all of my interests if I do not limit my activities in some way.

You will find a great deal of my opinion concerning matters relating to the cold war in my book *Cybernetics*, and a great deal more in a book of mine which will come out at the end of the summer entitled the *Human Use of Human Beings*.

I am thoroughly sympathetic with the purpose of the meeting and wish you all good luck.

Sincerely yours,

Norbert Wiener

NW:z

March 29, 1950

Capitaine A. Kaufman  
Ecole de l'Air  
Salon de Provence  
Bouches du Rhone, France

Dear Captain Kaufman:

My book on Cybernetics has a French edition published by Hermann et Cie, 6 Rue de la Sorbonne, Paris. As far as I know this edition has not been sold out, and you may obtain it there. It is entirely identical with the American edition.

Sincerely yours,

Norbert Wiener

NW:z



March 29, 1950

Professor Morris Kline  
Department of Mathematics  
New York University  
Washington Square College of Arts and Science  
Washington Square, New York 3, New York

Dear Professor Kline:

Thank you for your invitation to participate  
in the Symposium on The Theory of Electromagnetic  
Waves. Unfortunately, previous engagements will  
prevent me from accepting this very kind invitation.

Sincerely yours,

Norbert Wiener

NW:z

March 30, 1950

Mr. M. G. Malti  
School of Electrical Engineering  
Cornell University  
Ithaca, New York

Dear Mr. Malti:

Thank you for your letter of the 17th of March.  
I accept informally the responsibilities of  
serving on your subcommittee on mathematics  
pending official ratification of my appointment.

Sincerely yours,

Norbert Wiener

NW:z



March 30, 1950

Secretary of the Faculty  
Room 4-144

Dear Sir:

In view of the fact that I have been away for a term, and that my present teaching activity brings me into very little contact with individual undergraduates, I find myself unable to cast a vote in the poll indicated by your letter.

This is due to no lack of interest or belief in MIT undergraduates, but merely to the specific position in which I find myself.

Sincerely yours,

Norbert Wiener

NW:z

To Members of the Faculty:

BALLOT FOR ELECTION OF THE  
UNDERGRADUATE POLICY COMMITTEE  
TO SERVE IN ACCORDANCE WITH FACULTY RULE 11a

Lawrence B. Anderson	<input type="checkbox"/>	Leicester F. Hamilton	<input type="checkbox"/>
James A. Beattie - -	<input type="checkbox"/>	James Holt - - - - -	<input type="checkbox"/>
Herbert L. Beckwith	<input type="checkbox"/>	John A. Hrones - - -	<input type="checkbox"/>
Charles H. Blake - -	<input type="checkbox"/>	Arthur T. Ippen - - -	<input type="checkbox"/>
Douglass V. Brown - -	<input type="checkbox"/>	William T. Martin - -	<input type="checkbox"/>
Sanborn C. Brown - -	<input type="checkbox"/>	Hans Mueller - - - - -	<input type="checkbox"/>
Lynwood S. Bryant - -	<input type="checkbox"/>	Shatswell Ober - - -	<input type="checkbox"/>
Edward L. Cochrane - -	<input type="checkbox"/>	John T. Rule - - - - -	<input type="checkbox"/>
Arthur E. Fitzgerald	<input type="checkbox"/>	Ascher H. Shapiro - -	<input type="checkbox"/>
Edwin R. Gilliland - -	<input type="checkbox"/>	George E. Valley - -	<input type="checkbox"/>
Roland B. Greeley - -	<input type="checkbox"/>		

Rules for the Election

1. Vote for any eight men above.
2. Mail this ballot in the return addressed envelope in time to reach the Secretary of the Faculty by Friday, April 7.

\* \* \* \* \*

The procedure for counting the ballots will be:

- a) The first four men declared elected shall be those in each of the four areas, Architecture and Planning, Engineering, Humanities, and Science, receiving the largest vote in each area.
- b) The remaining four men elected shall be those receiving the next largest vote regardless of area.
- c) The length of term shall be determined on the principle that the persons with the largest vote serve for the longest terms.

The Faculty Nominating Committee

W. C. Greene  
R. H. Robnett  
E. S. Taylor  
J. R. Zacharias  
G. S. Brown, Chairman



March 29, 1950

Dr. Harlow Shapley  
National Council of the Arts, Sciences, and Professions, Inc.  
49 West 44th Street  
New York 18, New York

Dear Dr. Shapley:

Unfortunately, as yet, the correlation between an individual and a remote region of space time is nearly one to one. Nor is there any way in which I can exercise the divine prerogative of omnipresence.

However, I shall be with you in spirit, and as a token of this spirit, let me indicate my respect for your many sided activity and your high social conscious.

Sincerely yours,

Norbert Wiener

NW:z

March 29, 1950

Dr. Grey Walter  
Burden Neurological Institute  
Stoke Lane, Stapleton  
Bristol, England

Dear Walter:

Thanks for the reprints and your note. I shall read them and send you back my comments.

There was a write-up of Elmer and Elsie in Time magazine this week!

Sincerely yours,

Norbert Wiener

NW:z



# COPY

March 30, 1950

Mr. A. O. Morse  
Assistant to the President  
Pennsylvania State College  
State College, Penn.

Dear Sir:

I am informed that in connection with the reappointment of Mr. Lee Lorch in your Mathematics Department a question has been raised which seems to have an immediate bearing on the broader issue of academic freedom. No scientist or educator can remain indifferent to such matters, and this is the reason why, far from having a desire to interfere in the internal matters of your institution, I take the liberty to convey to you my opinion, which I am sure is shared by a large number of university teachers throughout the country.

On the basis of information which is available to me, it appears that Mr. Lorch has been recommended for reappointment by his department, and that his professional competence and personal relations with his colleagues are not an issue. It seems that the sole reason his status as a staff member has been questioned at all, is his stand on inter-racial relations and in particular his activities in Stuyvesant Town, directed against racial discrimination.

When this highly competent teacher was added to your faculty a year ago, despite the controversy centering around his name, many educators felt that your institution had rendered a distinct service to the cause of academic freedom. It is hard to believe that a year later the effects of this courageous step should be nullified by refusing to reappoint Mr. Lorch because of his activities outside the campus. By taking such action your institution would publicly endorse the view that a member of your faculty relinquishes his right to hold and proclaim views on matters of public interest in accordance with his conscience and convictions. Needless to say, if this would become general policy in educational institutions, the effect would be most disastrous for intellectual life and for the spirit of free inquiry.

I'm aware, that many educational institutions find it increasingly difficult to maintain their ideas of tolerance

# COPY

Mr. A. O. Morse  
March 30, 1950  
Page 2

and academic freedom in the face of powerful pressures to which they are subjected. I believe that it is of tremendous importance for every university not to yield to such pressures and I wish to express my hope that in Mr. Lorch's case your institution will not take any action that would compromise the cause of academic freedom.

Yours very truly,

Witold Hurewicz  
Professor of Mathematics



March 30, 1950

March 30, 1950

Mr. A. O. Morse  
Assistant to the President  
Pennsylvania State College  
State College, Pennsylvania

Dear Mr. Morse:

I hope you will not mind my writing to you about a matter that in one sense is none of my business but I feel this matter involves issues which are important to all university people. I am referring to the reappointment of Prof. E. R. Lorch of your mathematics department. Also, since I have heard that there has been some pressure on your institution because of some of Lorch's activities I thought you might be glad to know that academic people support his reappointment.

I feel Lorch's case is important to all university people because it seems to involve academic freedom. From what I know, as a fellow mathematician, of Lorch's competence as a teacher and mathematician I am pretty sure his professional competence can not be questioned, hence I feel any question about his reappointment probably involves the problem of academic freedom. I believe, and I think most of my colleagues in all universities believe, that professors should be judged solely on their competence as teachers and scholars and as contributors to their academic community. I believe any other standards would involve a loss of intellectual integrity and a consequent degeneration of our universities. That is why I, and numerous colleagues in universities, feel the reappointment of Lorch is important for us.

It would seem to me a real personal tragedy if a man of Lorch's calibre were sacrificed for standing up for social principles in which he believes, but I believe that consideration is only secondary to the consideration of academic freedom. I assure you that I and very many others will feel the greatest respect for you if you see fit to reappoint him. I also feel, incidentally, that it

is also in the interest of Pennsylvania State College to do so for good mathematicians, as well as good men in other fields, are anxious to go to universities where they feel academic freedom is really respected.

Very sincerely yours,

Warren Ambrose

(Assistant Professor of Mathematics, Massachusetts Institute of Technology.)



March 30, 1950

Mr. Gordon Bowles  
Conference Board of Associated Research Councils  
Committee on International Exchange of Persons  
2101 Constitution Avenue  
Washington 25, D.C.

Dear Mr. Bowles:

Enclosed is Dr. Wiener's medical report which  
he has asked me to send on to you.

Sincerely yours,

*Margot Zemurray*  
Mrs. Margot Zemurray, secretary  
to Dr. Norbert Wiener

March 30, 1950

Mr. F. Ronald Mansbridge  
Cambridge University Press  
51 Madison Avenue  
New York 10, New York

Dear Mr. Mansbridge:

I wish to thank you for your kind letter of the 28th of March in which you suggest that the Dover Publications take over my Fourier Integral. The terms you suggest are generous and perfectly acceptable to me.

I suggest that it might be worth while looking over the text with the view of either making a new edition, or at any rate removing some of the standing errata which I have found, and which are my fault.

My connections with the Cambridge University Press and with Cambridge University itself are among the things that I value most highly. In the meantime, I hope that the present period of austerity in England may prove to be something temporary and that instead of the danger and destruction that threatens us at the present time, we may move into a period which will reward the fortitude of your country by peace and success.

Sincerely yours,

Norbert Wiener

NW:z



*rows*

CARNEGIE INSTITUTE OF TECHNOLOGY  
SCHENLEY PARK  
PITTSBURGH 13, PENNSYLVANIA

304

[ca. 3-31-50]

DEPARTMENT OF MATHEMATICS  
COLLEGE OF ENGINEERING AND SCIENCE

Professor Norbert Wiener  
Mass. Institute of Tech.  
Department of Mathematics  
Cambridge 39, Mass.

Dear Professor Wiener:

I expect to be in Boston for a day on April 4, 1950 and I hope that it will be possible to see you so that we can discuss scientific and other matters. I hope you will be in town.

Sincerely yours

*Albert E. Heins*

Albert E. Heins

AS

L.H. 160

Telegrams : SPLYMIN WIRE LONDON

Tel. No. : GERrard 6933

Extn. 874

Any communication on the subject of this letter should be addressed to :

**THE SECRETARY,**  
and the following reference quoted.

7/Cttee/278(51)

Your Ref. ....

MINISTRY OF SUPPLY

Room 1037,

SHELL MEX HOUSE,  
STRAND,

LONDON, W.C.2.



31st March, 1950.

Dear Professor Wiener,

Inter-departmental Technical Committee  
on Servo Mechanisms.

Many thanks for your letter dated 20th March, 1950.

I have sent a copy to Prof. Hayes at the Military College of Science, as he is Chairman of this Committee.

We are glad to note that you may be in this country in July, 1951 and hope that you will be able to take part in the Conference.

The Conference will be organised by the Director of Scientific and Industrial Research, and will not discuss anything requiring Secrecy arrangements.

With kind regards,

Yours sincerely,

*J. Morris.*  
for Secretary.

Professor Norbert Wiener,  
Massachusetts Institute of Technology,  
Cambridge 39, Mass.  
U. S. A.

Copy to: Prof. Hayes



CONFERENCE ON METHODS IN PHILOSOPHY  
AND THE SCIENCES

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Executive Committee for 1949-50

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RICHARD COURANT  
IRWIN EDMAN  
MASON GROSS  
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SIDNEY HOOK  
HORACE M. KALLEN  
GAIL KENNEDY  
MILTON K. MUNITZ  
ERNEST NAGEL  
I. I. RABI  
SIDNEY RATNER

March 31, 1950

Dear Professor Weiner,

On behalf of the Executive Committee of the Conference I have the pleasure of inviting you to become a member of that Committee. Official nominations and elections will be held at the forthcoming meeting April 30 at the New School. I might add that the duties of membership entail simply attendance upon its semi-annual meetings, and at which plans for meetings of the Conference are made. The "term of office" is generally for three years.

It would be a privilege to have you become a member. May I look forward to an early and favorable reply?

Sincerely,  
Milton K. Munitz

Department of Philosophy  
New York University  
New York 3, N.Y.

[ca. 3-31-50]

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASS.

3024

DEPARTMENT OF MATHEMATICS

Kjære Hrs Professor!

Jeg vilde gjerne uttrykke mine hjertlige tak for Deres venlighet mot mig da jeg hadde igår den store ære av å møte Dem. Det gjorde mig virkelig ondt at De måtte gå borte just før jeg telefonerte til Deres byrå for at komme til å takke Dem og ta avsked!

It was very good of you to prepare for me a galley copy of your forthcoming book; I shall read it with great interest, and shall hope to write to you about it.

Your brief exposition to me on the attack on non-linear problems was very stimulating; I shall hope to follow it up as best I can. The use of Laguerre and Hermitian polynomials is of great interest to me from the standpoint of operational calculus.

I do hope I shall have the pleasure of seeing you again, perhaps in England next time.

With renewed thanks,

Yours very sincerely,

H. Proctor Wilson

最幸福為貴方

五零年四月十八日